



THE ATARI JOURNAL

THE PUBLICATION FOR THE ATARI MICROCOMPUTER USER

\$2.00

LIBERTY!



IN THIS ISSUE:

EASY-DRAW 2.0

MIDI MAGICIAN!

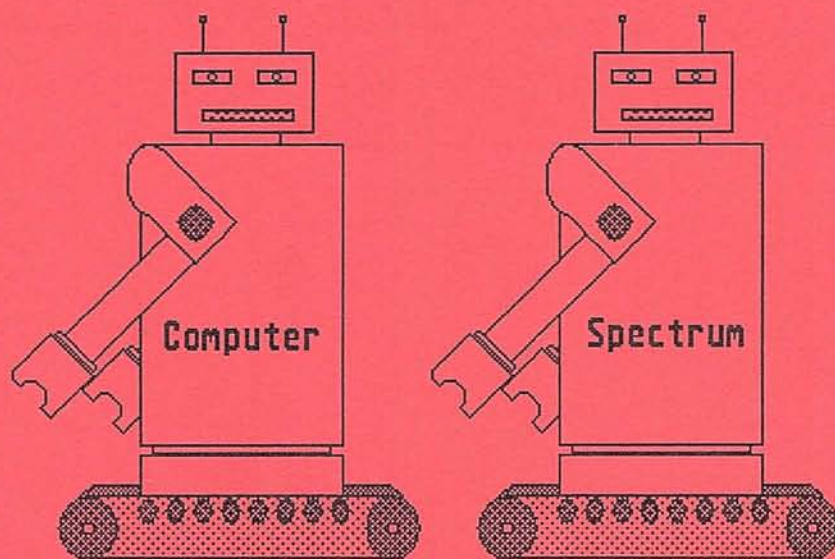
RUMOR MILL

READING
ANALOG
DATA

MORE!!!

VOLUME II, Number 6

JULY/AUGUST, 1987



Computer Spectrum Presents

"YOUR ST COMES ALIVE"

Build multiple modem controllers, light pen, speech synthesizer, event detectors, 120 volt controllers, simple networking projects, and much more. Seventeen chapters of exciting hardware projects for your Atari ST. The novice to the electronics expert can learn from and enjoy these projects. A disk of demonstration programs is included, along with the source codes. Four chapters include interfacing with the joystick, cartridge, MIDI, and printer ports. Complete with disk of software for \$29.95

"THE SCIENTIFIC ST"

Build frequency meters, waveform generators, biofeedback experiments, biological experiments. All chapters have an explanation of the theories involved. One chapter discusses science fair tips from the perspective of an experienced judge. Enjoy an edge over others with these high-tech projects. Complete with disk of software for \$29.95.

MATH LANDER

Manuever your landing module through dangerous situations by correctly answering whole number math problems. Eight different screens provide variety and challenge. For ST, \$29.95.

FRACTION BOULDERS

Fly your saucer in search of correct answers, while avoiding dangerous boulders. Sharpen your fractions skills while having fun. For ST, \$29.95

KRACK THE KREMLIN

A series of codes must be broken in order to get through the Kremlin's defenses. Decimal and percentage problems are presented and correct answers reveal necessary information. For ST, \$29.95.

Computer Spectrum, P.O. Box 162606-J, Miami, FL 33116

BBS Line (305) 251-1925 Office (305) 274-1850

Shipping: \$3.00 for U.S. orders, \$6.00 outside the U.S. No Shipping charges for two or more items.

Payment: With money order - SHIPPED IN ONE WEEK. With checks - Shipped in two weeks. COD orders, add \$5.00 Florida residents add 5% sales tax.

Dealer inquiries welcome.

ATTN:
PASCAL
USERS**MODULA-2**
the successor to PascalFOR
ATARI
520ST

- FULL interface to GEM DOS, AES and VDI
- Smart linker for greatly reduced code size
- Full Screen Editor linked to compiler locates and identifies all errors.
- True native code implementation (Not UCSD p-Code or M-code)
- Sophisticated multi-pass compiler allows forward references and code optimization
- Desktop automates Edit/Compile/Link cycle
- FileSystem, RealInOut, LongInOut, InOut, Strings, Storage, Terminal
- Streams, MathLib0 and all standard modules
- Directory search paths
- Supports real numbers and transcendental functions ie. sin, cos, tan, arctan, exp, ln, log, power, sqrt
- 3d graphics and multi-tasking demos
- CODE statement for assembly code
- 370-page manual
- Installs on Hard disk and RAM disk
- No royalties or copy protection
- Phone and network customer support provided

Pascal and Modula-2 source code are nearly identical. Modula-2 should be thought of as an enhanced superset of Pascal. Professor Niklaus Wirth (the creator of Pascal) designed Modula-2 to replace Pascal.

Added features of Modula-2 not found in Pascal

- CASE has an ELSE and may contain subranges
- Programs may be broken up into Modules for separate compilation
- Machine level interface
 - Bit-wise operators
 - Direct port and Memory access
 - Absolute addressing
 - Interrupt structure
- Dynamic strings that may be any size
- Multi-tasking is supported
- Procedure variables
- Module version control
- Programmer definable scope of objects
- Open array parameters (VAR r: ARRAY OF REALS;)
- Elegant type transfer functions

Ramdisk Benchmarks (secs)	Compile	Link	Execute	Optimized Size
Sieve of Eratosthenes:	6.2	4.3	3.5	2600 bytes
Float	6.4	4.8	8.3	4844 bytes
Calc	5.5	4.2	3.3	2878 bytes
Null program	5.1	3.2	—	2370 bytes

```

MODULE Sieve;
CONST Size = 8190;
TYPE FlagRange = [0..Size];
VAR FlagSet = SET OF FlagRange;
VAR i: FlagRange;
    Prime, k, Count, Iter: CARDINAL;
BEGIN (*SS-SR-SA+*)
  FOR Iter:= 1 TO 10 DO
    Count:= 0;
    Flags:= FlagSet(); (* empty set *)
    FOR i:= 0 TO Size DO
      IF (i IN Flags) THEN
        Prime:= (i * 2) + 3; k:= i + Prime;
        WHILE k <= Size DO
          INCL (Flags, k);
          k:= k + Prime;
        END;
        Count:= Count + 1;
      END;
    END;
  END;
END Sieve.

```

```

MODULE Float;
FROM MathLib0 IMPORT sin, ln, exp,
                    sqrt, arctan;
VAR x,y: REAL; i: CARDINAL;
BEGIN (*ST-SA-SS-*)
  x:= 1.0;
  FOR i:= 1 TO 1000 DO
    y:= sin (x); y:= ln (x); y:= exp (x);
    y:= sqrt (x); y:= arctan (x);
    x:= x + 0.01;
  END;
END float.

```

```

MODULE calc;
VAR a,b,c: REAL; n, i: CARDINAL;
BEGIN (*ST-SA-SS-*)
  n:= 5000;
  a:= 2.71828; b:= 3.14159; c:= 1.0;
  FOR i:= 1 TO n DO
    c:= c*a; a:= c*b; b:= c/a; c:= c/b;
  END;
END calc.

```

Product History

The TDI Modula-2 compiler has been running on the Pinnacle supermicro (Aug. '84), Amiga (Jan. '86) and will soon appear on the Macintosh and UNIX in the 4th Qtr. '86.

Regular Version \$79.95 Developer's Version \$149.95 Commercial Version \$299.95
The regular version contains all the features listed above. The developer's version supplies an extra diskette containing a symbol file decoder - link and load file disassemblers - a source file cross referencer - symbolic debugger - high level Windows library Module - Ramdisk and Print Spooler source files - Resource Compiler. The commercial version contains all of the Atari module source files.

Other Modula-2 Products

Kermit - Contains full source plus \$15 connect time to Compuserve. \$29.95
Examples - Many Modula-2 example programs to show advanced programming techniques \$24.95
GRID - Sophisticated multi-key file access method with over 30 procedures to access variable length records. \$49.95

TDI

SOFTWARE, INC.

10410 Markison Road ■ Dallas, Texas 75238 ■ (214) 340-4942
Telex: 888442 Compuserve Number: 75026.1331

Table of Contents

The ADVENTURER ----- 5
"Dead-Lines"
by Sara H. Groves

The MIDI Magician ----- 7
Get QUANTIZED!!!
by Brooks Reid

The DESKTOP ----- 10
"Up a Laser River..."
by Jack P. Durre'

Review: Easy-Draw 2.0 ----- 12
Is It?...Easy, that is.
by Barry Ober

READING ANALOG DATA WITH AN ST ----- 19
Part II of a hardware project
by Richard Leinecker

MUSIC STUDIO & THE CZ 101 ----- 21
Not quite new, but a closer look
by Bob Balay

The RUMOR MILL ----- 24

User Group News ----- 26

This Month's Cover:

In recognition of our country's birthday this month, it seemed appropriate to present this rendition of our national bird, the bald eagle. This drawing began as a small part of a Thunderscanned Macintosh image. It was ported over to the ST using "PICSWITCH 0.7", and "modified" through the use of DEGAS Elite.

From the Editor's Desk



Well, the big "World of Atari" show just recently came and went, in San Jose, California. While it was generally considered a "success", based upon the attendance, vendor support, and general good-time that was had by all, it was more probably much more successful for what it did NOT do...reveal any MORE new hardware to the already-jaded public! It seems that in this country, sales of 520 and 1040STs has dropped dramatically over the last months, according to "informal surveys", and most blame this on the "let's-wait-for-the-Megas" attitude. They were shown in January, and now, at the end of June, the average person has still been unable to even see one! Vaporware has long been a "Tramiel Tradition", but Atari seems to be a bit fragile for it, at the moment.

During the recent CES/COMDEX show conflict, Atari attended the "Gifts, Gizmos, and Gadgets" show, in Chicago, where they competed for attention with adult video tapes, 2-way wrist radios, and musical toilets, while several products were being shown...AND SEEN, in Atlanta, at COMDEX. These were serious BUSINESS products, including "PC_DITTO", the IBM-PC emulator, said to allow virtually all PC software to run on the ST. Atari sent Sig Hartmann down to rent a hotel room for a day or two. Good move, Atari! We've got a machine that can wow 'em all, as it runs virtually any Macintosh or IBM program, and does it fast, and CHEAP, and Atari would rather prove that it builds "games machines"! (Which they certainly do, but the public already KNOWS that! Just ask 'em!)

What's the point of this, you ask? (I know, we've all heard it before.) Just that a growing sentiment amongst the more serious out here is the beginning cry for Atari to just crawl into some dark corner, shut up, and build computers! If Atari is unable to market them to the public, then this group of developers, publishers, and supporters would prefer that they at least stop muddying the waters for those of us who DO! They *would* prefer that Atari listen, of course, and come to recognize (and admit!) that they've built the "generic 68000 machine" in the ST, and there are so many possible uses for it, that it practically boggles the mind! The fact that the games machines are the "cash cows" is understandable, but if that's the sole reason for being in business, then why continue to toy with us? Just drop the computer lines, and get on with it! At least we would then be able to move on, rather than trying to decide just how much longer we'll sit on the fence, before we have to select a different brand of computer!

Lots of ST owners out there play games on their machines, and there's certainly nothing wrong with that. The failure seems to be in the recognition of the ST, by Atari, as a SERIOUS machine, as well! They spend time on correcting what are apparently obscure bugs in a program that carries a "name", Microsoft Write, when the PR value of that name had some value, at the time it was first announced. By the time that it actually is released (if EVER!), it will be old hat, and not likely to be noticed any more! The same story with the blitter chip - It's been talked about for so long, and is now delaying the shipment of complete Megas, due to low yields, and in the interim, the better programmers out there seem to have found the workarounds, so that it no longer has the importance once held. These are sad failings, and give cause for serious reconsideration to a company whose helm seems to be floundering. At this rate, Mr. Gould and his mis-managed company WILL overtake Jack Tramiel's lead!

Please!!!

See ya!
[Jack]

The Atari JOURNAL is an independent publication for the Atari microcomputer user, and is published monthly, except January and August. Correspondence concerning The Atari JOURNAL may be directed to:

Editor, The Atari JOURNAL
13904 S.W. 75th Street
Miami, FL 33183
Telephone (305) 382-1900

Opinions expressed in this publication are those of the individual authors, and do not reflect those of the editor, nor of The Atari JOURNAL. Permission to reprint non-copyrighted material is hereby granted, provided that appropriate credit is given to The Atari JOURNAL, and the Author, where applicable. Unsolicited submissions are welcomed for review and possible inclusion, but if return is expected, sender should include a self-addressed, stamped return package.

The Atari JOURNAL is not affiliated with any wholesale or retail computer establishment. "Atari", "400", "800", "600XL", "800XL", "1200XL", "65XE", "130XE", "XL", "XE", "ST", "520ST", "1040ST", and "MEGA" are trademarks of the Atari Corporation. Other trademarks are often cited in this publication as well, and all material should be treated with this thought in mind.

Advertising Rates: Camera-ready copy should be submitted no later than the 15th of the month preceeding publication. Rates are available upon request, and discounts are provided for multiple insertions. Contact the Editor at the above address for further information.

Back Issues: A limited number of back issues are available at \$1.00 per copy. Contact the Editor for availability of specific issues.

Exchange Subscriptions: Subscriptions are available on an exchange basis with other Atari publications. Exchanges should be sent to the attention of the Editor, and should include a request for exchange.

Subscriptions: Subscriptions are available at an annual rate of \$17.50 per year (for 10 issues), and checks should be made payable to "The Atari JOURNAL", and mailed, along with a request for subscription, to the Editor's attention.

Postmaster: Please direct changes of address, and all returns to:

Editor, The Atari JOURNAL
13904 S.W. 75th Street
Miami, FL 33183



The

Adventurer

by Sara H. Groves

The trouble with deadlines is they aren't very flexible. There are three games due out this month but the ship date for the first two is the 15th. A "ship date" is the time projected for shipment from the factory. So, a ship date of the 15th means the software won't arrive in retail stores until the 18th at the earliest. All of which brings me to today without any new games since last month. Well, that gives me two months to enjoy myself and deluge you with information in August. Whee!

I spoke with Firebird in New Jersey and it seems they plan to bring out the 68000 versions of **GUILD OF THIEVES** all at once and there's a bug in the save feature of one of them. Since they don't know whether it's hardware specific or not, they were forced to hold up all three until they can figure it out. In any case, they expect to ship the ST version in late June and the 8-bit versions approximately a month after that.

Rumors of a sequel to **THE PAWN** have proved to be similar to most rumors. Partly true. Magnetic Scrolls, the company that wrote Pawn has written a new game. Called **GUILD OF THIEVES** it takes place in Kerovnia but not in the same area and it's 1,000 years later. You are dropped off in Kerovnia by boat because you want to join the Guild. In order to do this, you must steal everything on the island. That's right. Everything. They didn't say what was there but it sounds rather

intriguing. According to Terry Boyd of Firebird, this game has a better plot, enhanced graphics(!), a definitive ending, and some interesting new features. One of his favorites is a new type of command, "find", "run to", etc. [a place]. What it means is you do not have to make a map if you don't want to. In addition, the hints have been revised to cover all the problems you will encounter with the last one being the specific answer. They've even redesigned the package. It contains a copy of "What Burglar" magazine, directions, clues, hints, anecdotes, a membership card, and a certificate. When you finish the game you can complete your membership card and send in the certificate for a Guild t-shirt and a magazine subscription. Terry said "It's the best box I've ever seen!" They went out of their way to make it the **BEST** they could!" There is one problem though. The game was designed to have music but, after it was all written, someone stole it! They expect to have the 8-bit versions out approximately a month after the 16-bit versions.

Firebird has another game on its way, scheduled for the end of July, although their target dates are certainly not known for accuracy. This one, **NIGHT ORC**, was written by another new British company called Level Nine Software and you are an orc. About 100 famous characters, including Ghengis Khan and Rapunzel, are trying to kill you

and all you want to do is return to your home up on the mountain. Along the way you must make some tools and a great deal of creativity and ingenuity will be needed to use the rather unusual materials at hand. It's a long game, requiring 3 disks, with a special graphics system using a new digitization method "so superior you won't be able to tell they were digitized at all." There will also be music in the game, a title song at least but possibly more.

The IBM version of **Leisure Suit Larry** is now shipping and the ST version is next. It should be here within the next three weeks to a month. We have discovered what appears to be a bug in the ending to **Golden Path**. The number of steps [points] you get for your final action varies according to how many steps you had when you did it. The result is you finish the game with 98 steps out of a listed 100 no matter what you do. We are in contact with the company in England but have not yet received an answer. While it's possible that we missed something, the varying point count indicates otherwise. Recently, I saw what was called a "Demo" of a new **Star Trek** game put out by Simon and Schuster. It had some beautiful graphics, was completely 'mouse-driven', and seemed much like a role-playing game with an old fashioned "hack and slash" style. It was riddled with bugs though, and appeared to be a **VERY**

(continued...)

The Adventurer (continued...)

early beta. Since then I have discovered that it was written by a British company and verified its non-demo status but was unable to verify the rumor that S & S has decided not to produce it at all because of the piracy. It is exactly this sort of problem that can completely destroy a struggling software company and does irreparable harm to the industry as a whole. From the information I received, the group writing the game is a small one struggling to get started. What will happen to them as a result of someone's decision to "share" the game? I don't know but they wouldn't be the first company to disappear from this sort of thing. It's too bad, because the game has real promise and could be one of the first in its field to be written on the Atari ST, taking full advantage of the special features available. We need more software developed on the ST, not less. Did they "owe" it to us? No. Why should they? What did we ever do to earn it?

In order to get new Atari software, someone has to decide to write it. In

order for new software to be worthwhile, the decision to write it has to be made on a rational basis by someone who has worked hard to learn how to program an Atari computer. What's a rational decision?

Well, for someone who intends to earn a living from programming, it must include some reason to believe that a living wage can be made selling Atari software. The basis for a decision that software for a certain machine will sell is experience, either personal or that of others. If Atari owners consistently steal what they want, then it would be irrational masochism to spend a few thousand hours writing Atari software. So what happens? The programmers look around for some other machine to program. Without decent software, computers don't create clutter they *become* clutter.

Whose responsibility is it? Are you supporting good Atari software or good software for some other machine?

Question Time:

Golden Path: *There's a bug in the program! At the Incense Tower it lists yellow incense but I've searched every inch of it and it's not there! How am I supposed to finish the game without it?*

A. Well, there may be a bug in the program but that's not it. The incense is there all right. Look at the Tower, on the second level, near the top. See the thing that looks sort of like a candelabra? Yup! That's it. Good luck getting it. :-) [Oh! Okay. Just a little one. You can't climb up there but if you throw something at the incense it will stay there.]

Bureaucracy: *Yipes! I'm in the numbered rooms and no matter where I go I always end up in the same place.*

A. Do you have the cart from the Zalagasans? Remember the mail? Notice anything about it that might give you a hint using the program? How much do you know about reading Chinese?

King's Quest III: *How do you find the treasure? I listened to the rats and followed the directions but I couldn't find it. Did I miss something? Is there a code to use?*

A. The treasure is right where they said it was but you have to be very careful or you'll miss it. Many people never find it at all. Go to the tree and use SLOW mode. Position yourself at the tree and carefully pace the distance. When you get there, dig. If you don't find it the first time, use the graphics to estimate where you might try next. Move only a very little and try again. The main thing is you have to be in exactly the right place or you won't find it.

In addition to being one of the premier computer adventurers in the country, Sara Groves is married to David G. Groves, who is the Senior Sysop on Compuserve's Atari SIGs. She and David share a pair of 520ST computers as well as two separate modems on two separate telephone lines!

Introducing Regent Base with



Regent Express™

For people who don't want to program

Now with our new **Regent Express** you can make use of the most powerful **GEM** database for the **Atari ST**, without programming! Now all the information you need for day-to-day management tasks is at your fingertips. **Regent Base** is **GEM** based, **point and click the mouse** and you can create a new database, edit existing information, and produce complex reports summarizing any information in any database!

For people who do want to program

The new version of **Regent Base** is packed with twelve new commands, more **GEM** functions, check writing functions, much faster sorting and indexing, and the ability to use data from other software. **Regent Base's** procedural language is easy to use and state of the art. You can even import files from **DBman™** and **H&D Base™**.

Either way, the choice is yours.

H&D Base is a registered trademark of H&D Software.
DBman is a registered trademark of Atan Corp.



REGENT SOFTWARE

7131 Owensmouth, Suite 45A • Canoga Park, CA 91303 • (818) 882-2800

The MIDI Magician

by Brooks Reid

Quantize! It's the magic word.

Remember Jules Vern's "Time Machine"?

Time displacement...it's a fascinating idea. We may still have to wait a while to move matter around, but with music, well, this *is* 1987! Today's music demands perfect time; quantize, time correction, or error correction, makes it possible for less-than-perfect humans to master time.

Back in the dark ages (circa 1979) the Bee Gees, known in recording circles for their obsession with perfect meter, would record basic drum tracks with top session players, and cut the recorded tape into 4-16 bar sections to make "loops". These short pieces of tape were then spliced together in a circle, and rigged to play back a continuous repeating pattern. They stocked these bits and pieces to form a library of drum tracks that they could use to build any type of song.

Then Roger Linn came along. He invented the Linn Drum machine, and for the first time, rhythm boxes sounded close enough to the real thing to fool the record-buying public. Aside from sounding good, the thing that scared a lot of drummers was (you guessed it) "quantize". Quantizing is the ability to correct real-time-entered drum parts to the nearest beat, in exact time frames. Usually the values are: 1/2, 1/3, 1/4, 1/6, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48, 1/64, 1/96, and OFF.

The 1/6, 1/12, 1/24, and 1/48 are triplet values for 1/4, 1/8, 1/16, and 1/32, respectively.

The "off" value is still a quantization but with a very high resolution. Most drum machines default to 1/16 value, so it is always a good idea to think about your smallest note value before you start playing your part. If you are recording long notes use, 1/4 or 1/8, and for fast passages, maybe 1/16 or 1/32.

Just the fact that drum parts could be recorded quickly and easily was, in time a big relief on the budget for major recording studios and left a lot of studio drummers with fewer sessions. One big exception are the guys who learned how to use these new tools. A good drummer, playing a drum machine, could make the parts really work on a track. One guy who comes to mind is playing a lot of golf these days, not because he's out of work, but because he doesn't need to...he just picks up his royalty check in the mail every once in a while!

All this drum machine stuff was only the beginning. Once the same kind of quantize features were incorporated into sequencers, the same results could be seen. MIDI parts of any kind, entered in less-than-perfect time, could be corrected. This again gives the ability to not-so-hot players, to make great tracks, but here again, better players still have the advantage.

Maybe you don't want perfect time? No problem. Play it in real time, or use swing mode to throw it off a little.

There are all kinds of tricks to make tracks sound more "human"; mix it up, play some lines with quantize, and some without. My favorite trick is to record in real time, and play just a little sloppy. Try different values of quantize and see what happens! Usually I get my

best ideas from this technique because it often comes out with a feel I would not normally have played. We all have certain musical clichés we become bored with and try to break away from, but they keep coming back to haunt us, no matter how hard we try. I guess that's what they call "style". Well, this technique works perfectly for breaking old habits and creating some new inspiration!

Brooks Reid wasn't really a veterinarian, as first thought, but rather an assistant, whose job included holding the dogs and sheep! In his spare time, he taught himself to push buttons. From these humble beginnings, he's now become an accomplished(?) musician.

Tired of Switching Cables? Switch To

MONITOR MASTER™ for the Atari™ ST

- Single push-button switches between your color and monochrome monitors.
- Prevents damage to your cables and computer by omitting the need to plug and unplug your monitors.
- Custom molded case and cable matched to the ST.
- High quality construction ensures no picture or sound degradation.
- Audio jack enables the ST's sound to be fed into your VCR composite monitor or stereo.
- Composite jack brings out composite video on ST's with RF modulators.

ONLY
\$49⁹⁹

Plus Shipping & Handling



**Practical®
Solution**

602-884-9612

1930 East Grant Road, Tucson, Arizona 85719



THE COMPUTER ROOM

YOUR ATARI/AMIGA SALES AND SERVICE CENTER
10 A.M. - 8 P.M. MONDAY-FRIDAY 10 A.M. - 5 P.M. SATURDAY

COMPUTERS

AMIGA 500	COLOR / 512 K	\$1099.95
520 ST	MONOCHROME	\$ 499.95
520 ST	COLOR	\$ 739.95
1040 ST	MONOCHROME	\$ 849.95
1040 ST	COLOR	\$ 949.95
800 XL	64K / NEW	\$ 84.95
130 XE	128K	\$ 159.95
PC 10 - 2 Commodore	IBM PC Compatible	\$ 950.00

FLOPPY DISK DRIVES AND HARD DRIVES

COMMODORE 1010	AMIGA D/S DRIVE	\$ 239.95
ATARI 1050	8-BIT SINGLE-SIDED DRIVE	\$ 159.95
ATARI SF354	ST SINGLE-SIDED DRIVE	\$ 149.95
ATARI SF314	ST DOUBLE-SIDED DRIVE	\$ 224.95
ATARI SHD204	20 MEGABYTE HARD DRIVE	\$ 599.95
SUPRA	20 MEGABYTE HARD DRIVE	\$ 679.95
SUPRA	30 MEGABYTE HARD DRIVE	\$ 799.95

(305) - 771-9035

SALES AND SERVICE

MONITORS

ATARI SM124	HI-RESOLUTION MONOCHROME	\$ 144.95
ATARI SC1224	COLOR	\$ 324.95

PRINTERS

OKIMATE 20	COLOR WITH PLUG 'N' PRINT CART	\$ 224.95
ATARI SMM801	8-BIT DOT MATRIX PRINTER	\$ 224.95
ATARI SMM804	ST DOT MATRIX PRINTER	\$ 189.95
NP 10	100 CPS DRAFT / 25 NLQ	\$ 219.95
NX 10	120 CPS DRAFT / 30 NLQ	\$ 249.95
NB 2410	216 CPS DRAFT / 72 NLQ / 24 PIN	\$ 524.95
NX 15	120 CPS DRAFT / 30 NLQ / WIDE CAR.	\$ 424.95

MODEMS

ATARI SX212	300/1200 BAUD HAYES COMPATIBLE	\$ 99.95
ATARI XM 301	300 BAUD, 8-BIT	\$ 54.95
AVATEX 1200	1200 BAUD HAYES COMPATIBLE	\$ 124.95
AVATEX 2400	2400 BAUD	\$ 249.95
MULTITECH	2400 BAUD HAYES COMPATIBLE	\$ 424.95

KEYBOARDS

CASIO	CZ 101 MIDI KEYBOARD	\$ 299.95
CASIO	CZ 3000 MIDI KEYBOARD	\$ 599.95

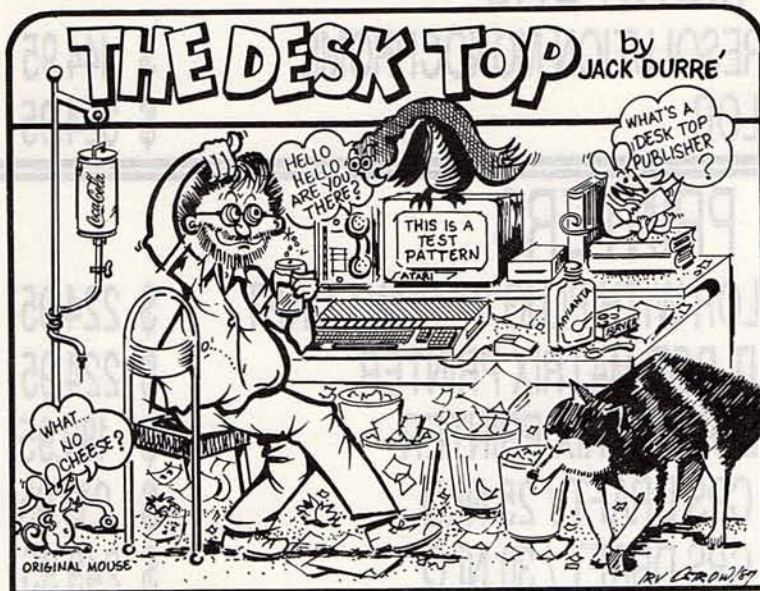
The Computer Room is a fully authorized ATARI sales and service center. We service both 8-bit and ST products. We also feature one of the largest selections of ST software in the area.

THE COMPUTER ROOM

981 WEST COMMERCIAL BLVD., FT. LAUDERDALE, FL 33309

305-771-9035

YOUR ONE-STOP AMIGA AND ATARI DEALER



I suppose that the above illustration deserves a bit of explanation...One of my "local assistants", Irv Ostrow, produced this drawing, after visiting me "in my den" only once... Actually, it was pretty neat around here, that day!

Last month, I tried to get things started with laser printers. With the impending (?) release of Atari's own unit, I thought that it might be a good idea to cover a bit more of this subject.

When first "leaked", over a year ago, the thought of Atari releasing a laser for "under \$1500" was intriguing, to say the least. Other lasers, at that time, were selling for appreciably more. Today, however, that same \$1500 will buy a very capable laser printer from a number of different manufacturers, and is only "middle-of-the-road", pricewise. I've seen lasers from Okidata advertised at less than \$1300, and Hewlett-Packard LaserJet IIs as low as \$1700. "Big Deal", you say? Yep...when you consider that these printers have the capability to work with most of the personal computers out there, including IBMs, Apples, and your Atari! Further, in the case of the H-P, things become even less clear, as it offers an upgrade capability, including increased RAM (up to 1.5 megabytes), and most likely, a PostScript card, in addition to its own DDL page description language from Imagen. If Atari is to compete with these, then the price will need to drop

ridiculously low, or the capabilities will need to be increased to a MUCH higher level. (Faintly reminiscent of the 1200 bps Atari modem, I'd say! A bargain, when first announced, but, due to production delays, it becomes, relatively speaking, only moderately-priced by release date!)

As an aside here, I should at least mention the existence of several (5, at last count) "PostScript-clones". These are interpreters, produced by other companies, that are able to handle page-description files written in PostScript, or their own rendition of it. The claimed advantages include faster speed, and lower cost. It IS possible that Atari might choose to utilize one of these, in an effort to save some of the licensing costs, as opposed to those charged by Adobe, for the original PostScript.

Well, what about the other lasers out there, in the low-priced category? The present "winner" is the H-P. It has the upgrade capabilities, as mentioned, but make no mistake... that upgrade increases the actual price, as well! If you're willing to "settle" for a 150-dpi capability, as opposed to the 300 dpi of most of the under-\$10,000 PostScript printers, then you can start here. If you want to increase the resolution, you'll need that upgrade to 1.5 megs. I've seen some 150 dpi pictures done by *Easy Draw*, and must admit that it looks quite acceptable, and if you're not overly-critical, you'll like it quite well, in the beginning.

One of the problems that we all face in this area is our previous experience. If you're accustomed to nothing more than 9-pin printer output, then you'll be overjoyed at any of the higher-quality methods available, whether a laser, or a 24-pin printer. If you're now using a 24-pin machine, and considering an upgrade, then the least-expensive lasers will delight you. If you've been using such a printer, either on your own, or in an office, and you move up to a PostScript-capable machine, such as the QMS unit that I'm now using, or the Apple LaserWriter, you will again enjoy the feeling of the "ultimate printer". The next step, which few of us have the wherewithal to buy on our own, but may choose to purchase time on, are the PostScript-capable typesetting machines, such as the Linotronic 100s, 300s, and 500s. These are "professional-quality" units, producing up to 2540 lines of resolution! Still, be prepared to find yourself flayed by a professional printer, who will likely scoff at your "computer-done junk", and insist that *the only GOOD type is set by HAND!* At some point in this ever-escalating spiral, your own mind is going to stand up and shout "STOP!"; you've gone as far as you can afford...for your perceived needs. For most of us, that will be below the PostScript-capable level. Be aware that there are all sorts of ways to work around that.

Just as with car rentals, it is possible to use a PostScript-capable printer, if you feel that you have need of it, without buying one. A few months ago, an ad was run here in *The JOURNAL*, by CACI, of the Washington, D.C. area. These folks will print your files on either an Apple LaserWriter, or a Linotronic 300. Their rates for this are quite reasonable, and the turnaround time is excellent. I have also done some of this sort of thing with my QMS, and will continue to do so, for those who wish to send me *Publishing Partner* files, either by modem, or on a disk. This allows you to proof your files on a much less expensive printer, including a 9-pin unit, while utilizing the higher quality output of PostScript for the final copy. Well worth considering for the occasional file.

Let's assume that you want to do just what I've suggested here. Your first step, of course, will be to design

(continued...)

The Desktop (continued...)

your layout to suit yourself, using Publishing Partner, or other PostScript output program. (*Ready Set Go*, from Manhattan Graphics should be along soon, and will have these same capabilities.) Once you've designed it, and have printed out your "draft" copies, to verify that they are at least a good approximation of what you'd like, you should save the .DOC file.

As a point of interest here, I'd like to mention that when saving a .DOC in Publishing Partner, the screen fonts (those ending with ".FNT" extenders) MUST be on that same disk, if you expect to later load it as the only piece of work to be done in that session. On the other hand, it's also wise to ONLY load the font(s) in use on that document, before saving. This means that if you've created a file, using Helvetica, exclusively, and your "FONT" directory includes not only Helvetica, "System" and "System Bold" (these last two MUST be there...they're the dialog box fonts used by the program!), but perhaps Times and Courier, as well, you'll need to save the last two to the disk, or you will get the "FONT NOT ON DISK..." message. Basic design rules for document design says that a minimal number of fonts should be used. This means that if you create every paragraph in a different typeface, that it will likely be so distracting as to prevent the reader from absorbing the message! Stick to one, or at most, two fonts for a complete document, if at all possible, and save ONLY those in the .DOC file.

OK, now you've saved it to disk, what do you do? Well, if you're going to send it by mail, or hand-deliver it to the laser's location, it should be obvious! If you're going to send it by modem, then you'll need to send it XMODEM, using a program such as FLASH. It's really quite simple, and there are few difficulties, UNLESS... you're going through a Macintosh-run system! In those cases, you'll have to be certain that you have the latest version of the "PS.PRT" drivers from Soft Logik. If you're not certain, I'd suggest that you contact them, and request a copy, or download them from Compuserve, or one of the other services. There were evidently some characters in the early PostScript drivers that caused problems on the Macintosh network, or the LaserWriter itself. At any rate, they

DO now work quite cleanly, and you should experience no difficulties.

If, on the other hand, you choose to cart your entire ST system down to your friendly LaserWriter operator's location, and connect it, then you'll have to have a null modem for your serial port, and a cable to run between your ST and the LaserWriter. The LW will be set up for the serial port, as opposed to the *AppleTalk* port, and should be set for 9600 baud transfer rate.

Last column, I also indicated that I'd have a bit more to say about the laser printer "cap" that I'm using, and the method in which I chose to approach this problem of PostScript output. I decided to purchase a QMS "Kiss" laser printer, and upgrade it. This seemed to be the more acceptable approach, economically, and I could have chosen any of the Canon engine-based printers available on the market, including the earlier H-Ps, Canons, etc.

To upgrade the Kiss printer, I purchased the "PS JET+" cap from The Laser Connection, a division of QMS, in Mobile, Alabama. At the time I obtained this cap, it was an early release of this version, as only the "PS JET" had been available, previously. The differences are just as with an Apple LaserWriter, and *LaserWriter Plus*; the number of built-in fonts available is greater with the "Plus" or "+" models. Additionally, The Laser Connection likes to point out that while Apple provides only 1.5 megabytes of RAM, the PS JET+ has TWO megabytes, making it capable of more downloadable fonts in memory at one time, as well as mapping the same page as the Apple machine.

The cap comes with a replacement serial port, and all necessary parts and instructions (with photos!) for a simple installation. If you know which end of a Phillips screwdriver to use, you can most likely perform this change, yourself. All of the information is quite clearly spelled out (and I was working with a manual for the "Jet", rather than the "+", due to having gotten such an early unit!) There are approximately 10 small screws to be removed, 3 electrical connectors to be disconnected, and simple instructions for the replacement of the original parallel port with the new serial unit, which is the toughest part of the entire

operation, because of its physical location. Once removed, and swapped, it is necessary only to replace the original cap with the new "+" one, and reassemble the machine. There is NO "trade-in value" to the original cap, so you are faced with that problem, but one suggestion made to me was to purchase a used Canon-based machine, and simply throw out the original cap! While this may sound rather frivolous, it is possible to find some rather low-priced used printers becoming available, with the newer models turning heads. It also seems that Canon has just announced the discontinuation of its "CX" model engine, which we're talking about, so that will most likely cause a price drop for used engines.

Once you've performed the "surgery", you'll naturally be anxious to try it out, but before you can do that, you'll need a "null modem cable" to go between the serial (RS-232) port of your ST, and the printer. You may choose to buy, or to make the null modem, which is really only a small block with a male 25-pin connector at one end, and a similar, female connector at the other. Internally, certain pins are swapped, while others are carried straight through. Beyond that, the cabling is identical with that used by a modem. You will also need to select the appropriate number on the thumbwheel switch on the new serial port of the printer.

Returning to the software, you will now need to configure Publishing Partner to use the "PS.PRT" PostScript printer driver. Once this is done, you are ready to try things out! First, upon "boot-up" of the printer, it will warm up for several minutes, before spitting out a test sheet, indicating a number of things about the printer. These will include the fonts available, the number of pages printed to date, etc. If all is well, you may now load a .DOC file into the program, and print it!

This should pretty well cover the topic for the moment, and next time, we'll see if Atari has yet shipped their own laser, and if so, what they may have chosen to do about the question of PostScript compatibility. Manhattan Graphics may also have released the ST version of "Ready, Set, Go" by that time, as well, so it bodes a full schedule!



Ok, I admit it. I'm finally hooked. And I guess I'll go on record as saying that if you had to have just ONE program for your ST, this would be it. This program is finally my friend. We understand each other. It works. Best of all, I can work it. It wasn't even a difficult friendship. It was...well, easy. Let me explain.

FROM MIGRAPH

Easy-Draw is from Migraph Inc. It is slightly difficult to sum up just what it can do that is different from other drawing or drafting programs, but you may not view it as a drawing program. It is much more! It is drawing, drafting, typing, word processing, page layout, yes, even desktop publishing, sketching, and more.

SOME DEFINITIONS

First, let's examine some definitions and ways to use this and other programs that call themselves drawing or drafting software.

Some of the drawing or "painting" programs such as Neochrome and Degas/Elite do things at the PIXEL level. When you draw a line, for instance, it is so many pixels strung out in a row. You can edit or change things one pixel at a time.

Other programs such as First Cadd (to be reviewed at a later date) define a line as two points, and each of those two points has a pair of coordinates, on a real or imaginary grid. This type of system is closest to engineering or architectural drafting as generally practiced professionally in industry. You can think of your work surface as being a number of transparent overlays, each with lines, squares, circles, etc. as might be drawn with a T-square, templates, and other mechanical devices.

Easy Draw is really, among

other things, an intuitive way to not just draw, but to get visual things on paper. These things may be typing, or thought of as drafting, or drawing, but not quite painting.

OBJECT-ORIENTED

Why? Easy-Draw considers everything as an OBJECT. It is therefore an OBJECT-oriented system of visual things. When you draw a line, it becomes an object. This object can be moved around, copied, stretched, thickened, or combined with other objects. This combination of objects can then be thought of as a separate, or new object. You get a very intuitive feel for selecting objects, moving them around, and it becomes easy to view an overall concept of a printed page — whether that page has text, or freehand drawing, or a schematic diagram or whatever.

There are no airbrush type modes or spray paint modes as in Degas or Neochrome. There are, however, various line widths available, and there is a freehand sketching mode. You could, for instance, use this mode to have your signature or some hand drawn flower (!) appear in your text. This drawing mode can also be edited as discrete points.

VEGETABLE ENTICEMENTS

To dangle the carrot in front of you for a moment, Easy-Draw is capable of many text sizes, fill patterns, and there is a ready made library of Clip Art, and it can import images, yes pictures, from many sources, and convert them to a monochrome image, which can then be easily (and I stress easily) printed. More on all this later... Oh, and here's the exciting part: the cost for the basic program is \$79.95. This means that overall, this is by far the most cost effective way to do brochures, or small catalogs, or flyers, or ad layouts, or flow charts, or schematics, or "pen and ink" type drawings, and so on. With a monochrome 1040 ST, Easy-Draw, and a moderately priced 24 pin printer, you are in business.

BOOTING UP

To the novice eye, (that's me before I started all this...) the program appears to have come from the land of Mac. It actually uses the true GEM GDOS interface. This means: It's very very polite. The program comes with and you MUST boot up with GDOS in an AUTO folder on

your boot disk. You cannot have the computer already on after having done other things and just pop the disk in and run; rather you must boot up properly. You are also advised against having too many big (and probably unnecessary) desk accessories, even ones that Migraph sells. (!) The politeness is quickly evident; the program appears to remember all the paths separately, with one caveat: never press RETURN in the middle of a GEM dialog box. The correct way appears to be to click on the box with the little cross in it. (Does that thing have a name?) Otherwise, you may bomb out and go bye bye. When I purposefully tried this sort of thing it was the only time I had any trouble.

FEATURES

Let's go over the program and examine it, feature by feature.

COLOR VS MONOCHROME

There's no comparison. Color is cute. Monochrome is positively gorgeous. Trust me, it's like a Mac that took its vitamins, and at oh, about one third the price. If you really need color, say for doing pie charts, bar graphs, maybe artsy signs for a store, or impressing your yuppie friends, then you still will be pleasantly surprised. Although I have not tried it, a color NEC printer might be a very nice combination with this software. I'll let you know.

2 OPEN WINDOWS

When the program opens you are greeted with an empty page named, cleverly enough, EMPTY1.GEM. You can also open a second worksheet called (you guessed it) EMPTY2.GEM. You can load a file into, say, #2, and then copy parts of it or move parts of it to #1. I call them WORKSHEETS, or even WORKSPACES, because they can each be set up to be any size page, with or without rulers and/or a grid to help you.

In the old world of pasteup, this worksheet would be called a "mechanical". The options are all separately settable, and the options are saved with the file, automatically. You could have an 8-1/2 x 11" letter in space #1, with 1/8" grid markings, and a 29 x 42 cm metric Din A3 drawing in space #2. Both can be visible, or sized to overlap, or clicked to open up full. Some subtlety here about the rulers: They get in the way sometimes,

but I discovered a trick. By clicking on the empty desktop with the right mouse button, the rulers move around to another quadrant. (There are a few omissions in the users' manual, and this is one.) The rulers always start at 0 inches, and there is no way to get them to read with 0 in the center. In many page layout sessions I think this is a desirable mode of operating. More on centering later.

THE CLIPBOARD

There's also a CLIPBOARD, for when you might want to temporarily store an image, or text, or whatever. You select what you want and drag it with the mouse to the clipboard, which, by the way, can only hold one item, although that item may be defined as many lines or even a whole page of other things. Unfortunately, you can't see what's on the clipboard until you drag it to an open workspace window. So essentially you have three workspaces to swap between.

DRAWING TOOLS

Clicking the right mouse button pops open a funny selector menu with boxes, lines, circles, arcs, and the word TEXT. You left click on what you want, then a cursor appears. You then draw something. Holding down the left mouse button draws something, and the right button stops the drawing. If this sounds confusing it is, but only for a few minutes. Like playing a musical instrument or driving a car, it takes some getting used to.

One of the drawing selection icons is called a POLYLINE. This is the most complicated and by far the most powerful tool. You can draw multisided objects with straight lines (polygons) or curved lines. These can be edited in a dot mode where each dot can be addressed with the cursor keys, and then moved around with the mouse. If an object is composed mostly of polylines, in any combination, it can be sized vertically or horizontally. Regular text cannot be continuously changed in size but there are several sizes available.

For those people who love doing bar graphs and pie charts, this is, um, a piece of cake. There's an ARC/PIE editing mode which shows you both the number of degrees and the percent

of the pie wedge. Editing is done by using the arrow keys, and the image changes as you are watching it. Very nice.

EDITING "OBJECTS"

When you place the mouse on top of something and then left click, a SELECTOR BOX pops around whatever the object is. It may be a line, a circle, a whole drawing, or indeed, a whole page. This selector box has little SIZING BOXES around the perimeter. If you click near the center of the item, a hand appears and you can move the object around. If you click on the little sizing boxes, you can enlarge or shrink the object, by any amount. There is a zoom feature to get in close to work on detail. You can only edit or enter text in 'NORMAL' size zoom mode. You can also zoom back to see the whole page to get an overview. Once something is selected, you can also COPY, FLIP, MIRROR, or ROTATE it, and you can put it IN FRONT OF or IN BACK OF something else. If you DELETE something, you can UNDELETE it, although it then pops back onto the top left corner of your worksheet. I judge this a peculiar inconvenience, because then you have to grab it and move it back again to where you might have originally wanted it.

CREATING and EXPLODING

Multiple objects can be selected most easily by SHIFT-left clicking, and then they can be ARRANGED or ALIGNED, or centered on the page. There is a pull down ARRANGE menu to guide you.

After multiple objects are selected, they can be combined to form a unified group. The easiest way to visualize this (without the program in front of you!) is to imagine a circle for a head, two circles for the eyes, a squiggle for the nose, and some carefully drawn lips done in polyline mode. Then these are combined to form a total 'face', which we are now calling one 'OBJECT'. This process is called 'CREATING' (I don't like the name) and the opposite, or taking things apart, is called 'EXPLODING'. I like that even less. However, it still works well, and you may think of it in other terms. In fact, you can get at these functions either with the mouse by pulling down menus, or by using certain ALTERNATE key combinations, and in a few

cases, the all too neglected F KEYS. The ALTERNATE + combination combines objects, and the ALTERNATE - combination explodes, or separates them. Why is this terminology ever so slightly misleading? Well, they don't really explode. This is not a space war game. They just sit there, but now they are not part of a group any more.

TEXT OPERATIONS

Here's where things get to be really interesting. You have built in here an amazing word processor program, disguised as a page layout program, disguised as a drawing program! In order to create text, you right click to get the menu, left click select the text option, and then draw a box where you want the text. The box can be as small as a word, or as large as a page, or the size of a headline, whatever. Then you start typing. When you're finished, you hit RETURN (we'll see why) and then right click. Now your text is surrounded by a selector box, and you have a few options. You can select or re-select NORMAL, BOLD, LIGHT, ITALIC, OUTLINED, or UNDERLINED text in 7, 10, 14, 18, 28, or 36 point sizes. Of course it would be nice if there were more sizes, and nice if there were more than one type face available, (maybe soon...read on) but you can still do a lot by creative use of these. So as you click on these options, you see the changes immediately.

Here's the great part: you can re-set the type size, for instance, to 10 point NORMAL, and then set a text window size, then load in an ASCII file which you have already created from your word processor program. The text will appear to pour in to the window. If you change the sizing of the window, the text will fill to accommodate the change. There is also a JUSTIFY option which makes the right margin smooth and for the most part the kerning appears to be just about flawless. This means that words like Illinois and AWAY will have their letters visually fit without too much or too little white space.

SPREADING IT OUT

As I mentioned above, ordinarily you would hit RETURN at the end of typing, say, a three word headline. This will ensure that the words are evenly kerned and spaced. If you don't hit RETURN, then you can creatively

COMPUTER

South Florida's Largest Supplier of ATARI

THIS MONTHS' XL/XE SPECIAL!

Atari WORD PROCESSOR PACK!

includes:

65XE Computer

1027 Letter-Quality Printer

AtariWriter+ Wordprocessor Program

\$349.95

New Software Arrivals!

- 221 BAKER STREET •
- RAMBO XL/XE •
- CHESSMASTER 2000 •
- VOICE MASTER •
- PAWN •
- MAIL ORDER MONSTERS •
- GUDERIAN •
- 8-TIME •
- WAR GAME CONSTRUCTION SET •
- TOUCHDOWN FOOTBALL •
- KYAN PASCAL •
- EARTH VIEWS •
- ARCHON II •
- GUN SLINGER •
- BOP 'N WRESTLE •

COMPLETE SELECTION OF
BOOKS, MAGAZINES, DISKS
PRINTERS, RIBBONS, JOYSTICKS
& MANY OTHER ACCESSORIES

**FACTORY AUTHORIZED
FOR ATARI XL/XE
(3 TECHNICALS
90-DAY WARRANTY**

**COMPUTER MAIL
OFFICIAL SPONSOR
SOUTHERN ATARI
BULLETIN BOARD
(305) 268-1**

NEW ATARI HARDWARE: DAISY WH

Financing

760 N.E. 167 St. 948-8943

User Group Member Discounts Available

Open 7 Days

IMAGE

Best and Most Current ATARI Hardware and Software

SERVICE CENTER
F & ST LINES
ON (TAFF)
FREE ON REPAIRS

RE IS THE
OF THE
REMOTE (S.A.R.)
SYSTEM
178

HEEL PRINTER XDM121 !!!

THIS MONTH'S ST SPECIAL

Atari 1040ST COLOR SYSTEM!

includes:

1 Megabyte of built-in RAM
Built-in Double-Sided 720K Disk Drive
RGB Color Monitor, BASIC

\$1040⁰⁰

Atari and Supra 20-megabyte Hard Drives in Stock!

See our W-I-D-E- selection of PRINTERS!

New Software Arrivals!

- LOGISTIK (1-meg & Jr.) • FLEET STREET PUBLISHER • GOLDEN PATH •
- AEGIS ANIMATOR • KINDERAMA • GOLD RUNNER • DOLLARS & SENSE •
- FLIGHT SIMULATOR SCENERY DISKS • PUBLISHING PARTNER • CAD-3D 2.0 •
- GFA BASIC/COMPILER • MICROLEAGUE BASEBALL • NEW ANTIC SOFTWARE •
- SUPERBASE • HARD BALL • C-Z ANDROID • ART PAK #1 •

Available

WE HAVE APPROXIMATELY 300
ATARI XL/XE AND ST
SOFTWARE TITLES IN STOCK!

10055 Sunset Dr. 271-1224

upon Presentation of Membership Cards

ays a Week!

adjust the size boxes to spread out the type to fill an odd space, or for an effect, but you cannot make the letters get too close together, or the letters on the right will start disappearing. With any of these editing modes, including text, there is a SNAP option which will always place your object or text on an imaginary grid line, for alignment. This grid can be made visible or not, and can be sized in 8 incremental spacings in the inch mode and 6 in the metric mode. This makes it very easy to align text in columns.

TINY BITS OF BAD NEWS ?

Now for the tiny bits of bad news: There should be more sizes, (and now there are...read the rest of the review!) There should be more styles. You can only do one of these types of changes inside one type box at one time. You can't make an odd size box and fill it with type. Here's the good news: these problems are workable. They take some effort, but they're workable.

SOME TEXT EXAMPLES

Let's say you were creating a newsletter, and you had some ASCII text done from another word processing program.

First you would create the headlines, and maybe some border artwork or a single bold line, or some dots for a fill area. (Not unlike this journal!)

Then you would make a TEXT SIZE BOX that extends the correct width and to the bottom of your first column. Load the ASCII file (the menu tells you to use the F1 KEY) and the box will fill up with text. Then move the cursor to the bottom of the box, and hit F10, which is the BREAK TEXT BLOCK key. Now you have 2 text blocks. The first one fills the first column, and the second can now be moved to the top of the new column.

When this second box is stretched open, an amazing thing happens: the rest of your text keeps appearing. You can continue splitting the boxes up and your text will keep appearing, until, of course, you run out of text. If you were to select 10 point size, then it would be approximately the same size and area as (dare I say it) old typewritten copy.

So although some of this appears tedious and rather convoluted to explain, once you play with these options for awhile, it all seems to work well,

and quite fast, too.

Designing forms, flow charts, organizational charts, room layouts, furniture designs, schematics, restaurant menus, and the like is very very easy.

I GET CARRIED AWAY...

The more I experimented with the text mode, the more interested I became in trying to do the painfully obvious. What about writing a letter or addressing an envelope? Well, you could do worse. The word processing part as a separate entity is really quite interesting. If you've ever used something like Xywrite or Spellbinder on an IBM or clone (or ST Writer except without any embedded commands) then you will understand what a very fast, nearly invisible word processor can do. Absolutely nothing gets in your way, until the end of the page, or the end of your text window. Then and only then do you get a little "ding" from the Atari speaker bell. Very cute.

I HAD TO SAY WYSIWYG SOMEWHERE...

The "TEXT" part of this program does not save files in any readable form by another word processing program. It does not save files in ASCII, but it does "import" them. You could conceivably open a text window the size of your full sheet of paper, and type away madly, and that would be it. You can't get much more WYSIWYG than this. Doing a piece of business correspondence in all 10 point is really quite nice. Envelope addressing is a bit more complicated but once you have your printer figured out it isn't too bad. In fact you can create some artwork, figure out with both the on-screen ruler and a real ruler where to place the images on the page, and then print a full page of flat labels, either with the same image or different images.

The first few times you try all these cute things they seem very difficult. Each time they get easier, until you mentally zoom in on all the parameters you need to arrange to get something to look nice. Such type tricks as shadows, white type on black backgrounds, ways to fit and estimate type and space are part of the learning curve of ANY design program, not just this one.

By the way, to make that white type on a black background, draw a box, fill it with solid

black, then create a type box that's the same size, type in it, and set the COLOR option to 0 (which is white). Now put the type on top of the black box, and that's it!

PRINTING

So we have a bunch of cute images and precious artwork and purple prose on the screen. Now what? First we SAVE it. The instruction book explains how, in almost painful detail. Then from inside the Easy Draw program, we select the OUTPUT option under the FILE pulldown menu. This opens up another program which I stress is available only from inside Easy Draw. You can now send output to the SCREEN, a PRINTER, and a PLOTTER and a CAMERA.

There is a printing list which you may fill out with more than one filename. Remember that this program considers each page a file. You can also think of it as "each file is a page layout". There are a whole bunch of printing defaults, and they too can be saved and/or changed. So you could have one set of defaults for doing restaurant menus, another set for doing company newsletters, and so on.

24 PIN PRINTER DRIVERS

When I first tried my copy of Easy-Draw there were no 24 pin printer drivers available - wow, was I frustrated! Now they are! You have to order them from Migraph for a very small fee (\$19.95) and then install them on a your disk. The instructions are VERY clear. So clear, that even I could understand them! There are some variations for normal vertical orientation (called PORTRAIT) and for horizontal orientation (called LANDSCAPE) but with some patience and experimentation you will figure out what your needs are. I just happen to use my printer in the sheet feed mode, one sheet at a time, because my paper types, sizes, and styles are always different.

Printing is quite fast, especially when compared to certain other programs such as First Cadd. It takes about 3 or 4 minutes to print a rather complicated 8 1/2 x 11 sheet. In the literature that comes with the 24 pin support package, it explains that the font drivers are 180 DPI (Dot Per Inch) drivers. This means that although they look great, they are still not taking full advantage of the THEORETICAL

resolution of the NEC series of printers. They are however, very, very good. If you look at things through a magnifying lens you might see the dots...otherwise the images are just fine. And if you make a xerox type copy on a good copy machine, the edge definition smooths right out.

Why aren't the 24 pin drivers 300 dpi? The reason for this is that the font files as supplied [from Digital Research] would have to be enormous to support that resolution. When your system booted up, it would have to load all those huge files into ram, and there would be no space left for the program you are using or your work files.

GOOD NEWS

Here are a few bits of secret good news, maybe even great news: Migraph is now offering 2 more typefaces in 9 pin mode, and will shortly be offering them in 24 pin mode. This is called FONT-PAK #1, and costs \$39.95 from Migraph. They also have a set for the HP Laserjet Plus and HP Series II (and compatible) laser printers. This set includes drivers for both 150 and 300 dpi, and is \$39.95. They also say a Postscript driver is in the works, as is a color dot matrix driver.

AND MORE GOOD NEWS!

Easy-Draw is currently (claimed) to be the only program that works with the ATARI laser printer. Keep your ears perked about this one...and I saved the best for last. I haven't seen it yet, or used it, but there is an additional program module which converts images from other draw or paint programs and imports them into Easy Draw, where they may be manipulated and re-sized. This is called THE SUPERCHARGER, and will tentatively cost \$49.95, from Migraph. This converts images from Degas, Neochrome, and other formats, and then makes a file with the extension *.IMG which can then be imported into Easy Draw. There will also be a way to use scanners, both standalone types, and the type that might attach to your printers' print head. Stay tuned for more details around August...

CLIP ART AVAILABLE

Migraph now offers a series of 'clip art' disks at a nominal fee. So far there is a PERSONAL DRAW ART #1 and a TECHNICAL DRAW ART #1. They are each

\$29.95.

PERSONAL CLIP ART



In the PERSONAL set, there are borders, examples, little pictures of airplanes and boats and fish and a clock and a mailbox and so on... Some of the things are a bit silly and some are very interesting, and they have the additional usefulness of showing you how to do things! By far the most interesting is an alphabet composed entirely of POLYLINE formed letters. This means that you can copy them, one letter at a time, to form a word or headline, then transfer that from, say, the 2nd window to the 1st, and since it is a polyline image, it can be continually sized and/or rotated in any direction, in any amount. You could also copy the letters and edit the polylines to form your own type of creative alphabet, then store it as a separate file.

TECHNICAL CLIP ART

The TECHNICAL DRAW ART #1 SET of clip art contains a file of electronic symbols, flowchart symbols, home floor and room planning goodies, piping symbols, hydraulic symbols, welding symbols, and pictures of real pipes.

I don't know about the piping and hydraulics, but I am certainly qualified to comment on the electronic symbols. They are not really to ANSI, IEEE or any other international standard, and they don't really look quite like the K&E Leroy template sets, which is what book and magazine publishers have graphic artists use. But they are useful, and they are a good start, and with a little editing on the part of the user, a fine beginning to a useful library. These auxiliary disks come with a little booklet which fits in your Easy Draw manual. There are pictures of each 'file' to guide you without you having to open each file to look all the time. There is a file called REALCHIP.GEM which is supposed to aid in laying out integrated circuits and resistors and capacitors and so on as a preliminary step in making a PC board. (Printed Circuit, NOT personal computer!) I judge this file to be just about useless, although I suppose it could give you a few ideas about the right way to do such a thing.

These images are sort of like an electronic emulation, if you will, of some products made by such companies as Bishop

Graphics and Brady. They make little plastic forms called 'puppets' which are cut out, like paper dolls, in the shape of electronic parts. You then organize these things out on a grid, to assist you with your layout.

It is my professional opinion that this program has come closer to a level of USEFULNESS than most others, and that includes things for Macs and IBM's too. There are, however, certain combinations of software and hardware which do some or many of these things better, but they cost many MANY times more, and require large amounts of hardware, and an enormous amount of technical investigation and preparation.

D T P

Even the nice people at Easy-Draw (Migraph) caution against calling this a full blown desktop publishing program. It should be really thought of as a PAGE LAYOUT program.

Calling it a drawing program is ok. For drafting, more or less 'real' drafting as in architecture or mechanical engineering, I would perhaps suggest First Cadd. Certain modes of operation of both of these programs are similar to currently accepted standards and practices. First Cadd, Degas/Elite, and Neochrome are NOT page layout programs! Nor were they intended to be.

SO, NOW WHAT ?

Given the constraints, the tiny limitations, the competition, the price, the fun, and the overall usefulness of this product, I have to rate it as quite wonderful and worth every penny and then some. Given also the programming effort that these people have put in, their dedication to really trying to make a good and useful product, their concern and willingness to help, and their dedication to the Atari ST, I can only hope that a cult of users will follow and flourish and enjoy this program, much the same as the early Wordstar users did on the first IBM's. This is a good, useful, workable, powerful, fun, fast, and expandable product that will not soon be obsoleted. It will help you to turn your Atari into the powerful and useful workstation it can become.

ONE LAST SURPRISE...

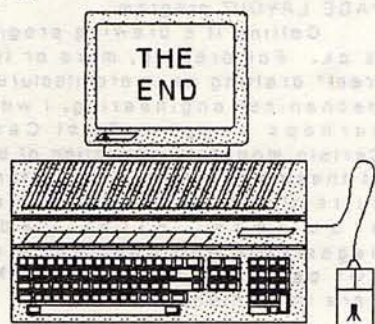
TURN THE PAGE !

FROSTING ON THE CAKE

I sneaked in this last minute surprise for those of you with enough perseverance to get this far! Migraph has just announced another incredible program for the ST...called M/CADD.

They claim it will offer complete integration from 3D preliminary design through 2D drawings. This is a GEM based program offering an associative drawing database, where if you make changes in the 3D section the changes will be reflected in the 2D section. The output will be directly compatible with Easy Draw. From all indications, this will be one of the real breakthrough software products for the ST. I'll keep you posted!

The nice people at Migraph are at 720 South 333rd Street, Suite 201, Federal Way, WA 98003. Their phone is 206-838-4677.



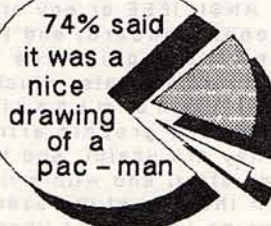
WELL ! you're probably wondering, *especially* IF you read the previous review, why I didn't **SHOW OFF**

JUST WHAT IS IS

that Easy - Draw
can do that is cute...

OK, LOOK!

OH!



24% of the people questioned thought this was a nice pie chart.

2% asked me if I could add 24 and 74

Editor's Note: With the exception of the material produced in this box, and the page numbers at the bottom, every thing that you have read and seen in this review was done by Barry, using Easy-Draw 2.0, and thier 24-pin dot matrix printer drivers, and utilizing the NEC P6. Generally, I will say that the original was a bit on the light side, but quite legible, and "clean". I did not witness the actual printing, and could not, therefore compare printing times, against "Publishing Partner", which I have used under similar circumstances. I do, however, understand that it is appreciably faster, and if you're trying to evaluate this type of program, you may consider this an important factor.

Also, lest any question arise, I will state at this point, that one of the letters to the Editor in last month's JOURNAL, while written by the President of Migraph, in no way influenced Barry in his evaluation, as it was substantially done by the time that he knew of that letter. As I indicated in my response to that letter, and will continue to say, The Atari JOURNAL is intended to serve the USER.

DeskCart!

THE ULTIMATE DESK ACCESSORY CARTRIDGE!

- ☐ Includes Time/Date clock hardware with battery back-up!
- ☐ Adds 14 convenient, powerful functions to your ST:
 - CALENDAR with appointment scheduler and alarms.
 - Multiple NOTEBOOKS with full-screen editing.
 - Full-featured CALCULATOR using mouse or key pad.
 - CARD FILER with searching, sorting and printing.
 - TYPEWRITER window for quick labels and envelopes.
 - ADDRESS BOOK with searching and auto-dialing.
 - TERMINAL EMULATOR with upload and download.
 - KEYBOARD MACROS for use in any program.
 - Fast, resizeable RAMDISK driver.
 - DISK UTILITIES: Format, Copy, Delete and Rename.
 - Multi-tasking PRINT SPOOLER with printer controls.
 - CONTROL PANEL with load and save options.
 - SCREEN DUMP to any graphics-compatible printer.
 - System MEMORY TEST and cartridge self-test.
- ☐ Uses only one Desk Accessory entry!
- ☐ All accessories operate as independent windows!
- ☐ ROM cartridge loads immediately and uses no program memory!
- ☐ Comes with tutorial diskette and complete manual.

DeskCart! Only \$99.95!

Qmi

QUANTUM MICROSYSTEMS INC.
PO BOX 179 LIVERPOOL, NY 13088 USA
(315) 451-7747

Reading Analog Data With an ST

Part II

by Richard Leinecker,
Author of "The Scientific ST"

In last month's article on reading analog data with an ST, it was noted that the ability to read analog data was missing from the ST computers. This is one feature that the eight bit computers had, which was sometimes helpful for hardware applications. There are many things that the ST is incapable of, since the built-in analog to digital converters have not been included. With the addition of some simple hardware, the ST can regain the ability to read analog data.

It might be helpful to repeat the difference between analog and digital data for those who missed last month's article. Digital data is a set of ones and zeros, a set of transistors in either a high or a low state. The low state approaches zero volts and the high state approaches five volts. These ones and zeros form the digits

of a binary number. A set of four of these digits comprise a nibble, a set of eight of these digits comprise a byte, and a set of sixteen of these digits comprise a word.

An analog signal may be at zero or five volts, but it may also be anywhere in between those two voltage levels. We will limit our discussion to analog signals between zero and five volts, although they may be at any level above five volts. Analog signals are a problem for the computer because it cannot interpret analog voltage levels. For this reason, analog-to-digital converters are used. The analog voltage is converted to a digital number and the microprocessor can then use it in the way that the software calls for.

This is the second of two articles covering the subject of analog data

built-in clock that is set by an external resistor and capacitor. Very few external parts are needed. One problem is that the converter needs to be strobed in order to put the digital data on the eight data output lines. For this reason, the joystick port cannot be used unless you can find a way to strobe the ADC803. Rather, the parallel port is the best choice, because the operating system automatically stokes pin one of the port when reading data.

The cartridge port is another alternative to the parallel port. The ADC803 is directly interfactable with the cartridge port so no data buffer is needed. The only problem then is obtaining the cartridge board. This can be ordered from a company called Bigfoot Systems. Their address is 2708 East Lake Street, Minneapolis, MN. I have etched my own boards but it is infinitely easier to order one from Bigfoot Systems.

For the purposes of continuity with last month's article, the example in this article will return the ambient light level to which a phototransistor is being exposed. This is an expansion of last month's project that sensed a light level that either exceeded or failed to exceed a pre-set level. The values returned by the ADC803 will range from 0 to 255. Figure 1 is the schematic of the parallel port version of the circuit.

More ST™ Solutions From
 Practical Solutions®

Monitor Master™ eliminates the hassle of swapping cables between your color and monochrome monitors. Just plug in and a single push-button switches for you! Separate audio jack hooks into your amplifier. Also brings out composite video on the 520's with RF modulators.

Quality construction with molded case and cable. **\$49.99**

RGB Video Cable featuring a molded connector at one end. Stripped leads at the other end with color coded wires allow easy hookup to non-Atari monitors. Also contains a composite lead. 4 ft. length **\$21.99**

Composite Video Cable
features molded ends and low loss video coax. 4 ft. length **\$14.99**

13 Pin Din male and female connectors. \$3.99

Dealer Inquiries Welcome!

Shipping & Handling:
\$3.00 48 States
\$5.00 Canada
\$7.50 Overseas

ST is a trademark of Atari Corp.
Monitor Master is a trademark
of Practical Solutions, Inc.



602- 884-9612

1930 East Grant Road
Tucson, Arizona 85719

reading techniques for the ST. The first article illustrated the use of voltage comparators to detect an input voltage that exceeded a pre-set reference voltage. This article illustrates the use of an analog to digital converter to read exact levels of an analog signal. It would be well to tackle the projects in the first article before taking these on, as those were easier and will give you some construction experience on a simpler level.

The heart of the hardware is an ADC803 analog to digital converter. This particular converter has a

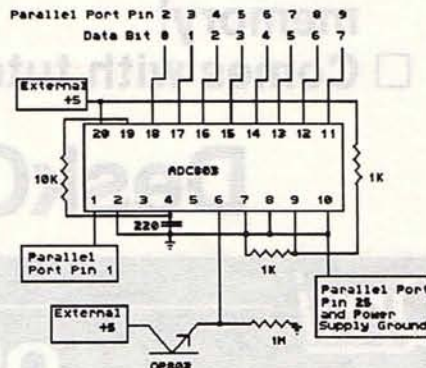


Figure 1

(continued...)

Reading Analog Data With an ST (continued...)

Parallel Port Connections:

Parallel Port Pin	IC Pin
1	1
2	11
3	12
4	12
5	14
6	15
7	16
8	17
9	18
11	10
25	10

Parallel Port Version Parts List

1 ADC803 Analog to Digital Converter
 1 220 pf disk capacitor
 2 1K resistors
 1 10K resistor
 1 25 Pin connector
 Hookup wire, breadboard, 20 pin IC socket, 5 volt power supply.

It would be wise to construct the circuit on a solderless breadboard before constructing a final version. When you do make your finished product, a perforated breadboard is very convenient to use.

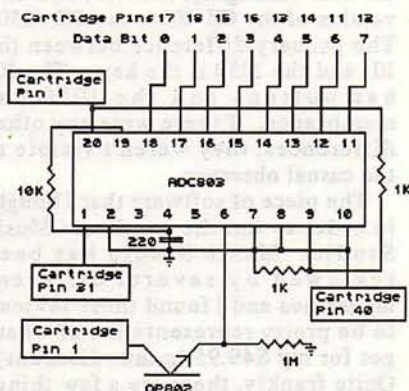


Figure 2

Figure 2 is the schematic of the cartridge port form of the circuit.

Cartridge Port Pin Connections:

Cartridge Port Pin	IC Pin
1	20
11	12
12	11
13	14
14	13

15	16
16	15
17	18
18	17
31	1
40	10

Cartridge Port Version Parts List

1 ADC803 Analog to Digital Converter
 1 220 pf disk capacitor
 2 1K resistors
 1 10K resistor
 1 Cartridge Board
 1 20 Pin IC socket

If you are programming in C, try the following program to read the data from the parallel port.

```
unsigned int data;
main()
{
  while(!Cconis()){ data=Bconin(0);
    printf("%u\n",data);
  }
}
```

If you are programming in BASIC, try the following program to read the data from the parallel port.

```
10 X=INP(0)
20 PRINT X
30 GOTO 10
```

If you wanted to use the cartridge port, the following changes in the connections must be made.

The converter can be powered by the cartridge port. To do this, you must connect pin 1 of the cartridge port to Vcc of the converter and the collector of the OP802 photo-transistor.

To read the data value you must read the lower cartridge RAM area. Without getting into too much detail, try the following routine.

```
char *data; char peek;
main()
{
  data=16384000L;
  while(!Cconis()){ peek=*data;
    printf("%u\n",peek);
  }
}
```

The preceding routine in BASIC is as follows.

```
10 X=PEEK(16384000)
20 PRINT X
30 GOTO 10
```

For more information on the cartridge port, refer to "Your ST Comes Alive!" published by Computer Spectrum. (Who???- Ed.) If you have any questions, feel free to call the Computer Spectrum BBS at (305) 251-1925. If you come up with a new and unique idea for the analog to digital converter, please get in touch via our BBS and let us know about it. There are several programs with source codes available on sig 2 of the Computer Spectrum BBS. Following is a list of sample programs that are available:

A2D_PAR.BAS ST BASIC program to display the status of the parallel port.

A2D_PAR.C Source code for the compiled program below.

A2D_PAR.PRGR Compiled program which displays the status of the parallel port.

A2D_CAR.BAS ST BASIC program to display the status of the cartridge port.

A2D_CAR.C Source code for the compiled program below.

A2D_CAR.PRGR Compiled program which displays the status of the cartridge port.

Richard "Rick" Leinecker is a Science teacher with Dade County Public Schools in Dade County, Florida. His company, Computer Spectrum, produces a series of educational games and books for the Atari computers.

Music Studio and the Casio CZ 101 Synthesizer

by Bob Balay

One of the reasons I was intrigued with the ST computer when it first appeared, was the MIDI port on the rear apron. Although I had never heard of MIDI (Musical Instrument Digital Interface) prior to the ST, I had seen different professional musicians with keyboards interfaced to their computer, which they were using as a track sequencer. Anyway, one of the mainstays of my personal philosophy about personal computers is that personal computers must have a wide range of personal peripherals in order to be a useful tool vice a game machine. (I hope I'm not being too personal here!) The MIDI interface allows for this type of expansion.

Now, I'm no musician. Those of you who know me, realize that I'm a great theorist, philosophizer, editorialist, writer, programmer, b.s. artist, and what have you, but I'm no musician. I can read sheet music with some effort, and I love listening to music. (This could give a whole new meaning to the term "sheet music" -- Get it? That's a joke! It takes two people to play "sheet music"...As opposed to "sheety music" which is lousy music played by a Mexican band!!!) So, when I discovered that I could buy a MIDI synthesizer (not that I could afford it anyway) for under \$350, I rushed right down to Jimmy's music here in Sumter, and made a deal (read, conned the manager) to buy one. I chose the CZ-101 by Casio because every article ever written on the ST's MIDI capabilities invariably mentions this instrument. My choice proved to be a good one for me because the CZ-101 is inexpensive, easy to use, and interfaces nicely with my ST and my home stereo system. The clincher, however, is the fact that Music Studio (© 1985 by Audio Light for Activision) is set up for compatibility with the CZ-101. Anyway, the Casio CZ-101 features an unlimited number of sounds because it is ADSR programmable. ADSR (Attack, Decay, Sustain, Release) programmability allows you to alter the sound by programming the sound envelope, much as you have to do with the Yamaha sound chip built into the ST.

However, if you are not interested in fooling around with programming envelopes (a tedious chore, especially for someone who doesn't have a background in "soundology", like me, or for someone who has the attention span of a gnat, also like me) there are 32 pre-set sounds already programmed into the synthesizer. (If you consider fooling around a tedious chore, you're probably married!) Sixteen sounds are called up by use of the 8 "PRESET" buttons and "SELECT" button (SELECT the top 8 or bottom 8 presets). Another 16 sounds are available by selecting the INTERNAL bank of sounds, which use the same 8 "PRESET" buttons and the "SELECT" button. The pre-programmed sounds include String Ensembles, Brass Sections, Percussion, String Bass, Electric Piano, Electric Organ, Whistle (human-type), Xylophone, Fairy Tale (a far-out thound!), Accordion, and a few others. The documentation, which is quite extensive, includes a data-book that has another 32 sounds that you can key in yourself (some of which are already preset). More sounds can be programmed into the machine if you purchase the \$35.00 RAM cartridge that plugs into the back. Additional equipment included with the synthesizer besides the documentation, (written in 3 or 4 languages), includes a patch cord for your amplifier, and a 6-pack of D-cell batteries. Jimmy's Music threw in an electric transformer (selectable, with several different styles of plugs...very nice!) at no additional charge.

The cables for the MIDI interface are not included, so you must purchase your own. You can find these at Radio Shack for about \$5.95 apiece. You will need two 6-foot cables, with 5-pin DIN plugs on each end. You may also want to consider buying a long extension for the output, if your home stereo is not in the same room as your computer. I used a 50ft wire with a male RCA plug at either end and a female-to-female RCA plug connector. The cable provided with the synthesizer is about 8ft. long with an RCA male plug at one end and a male phone plug

(same size as a headphone plug) at the other, with an RCA female to phono-plug adaptor. This allows you to plug your synth into either a guitar amp, or the back of your home stereo.

The best method of using the synth and the computer at the same time, for those who don't have a small guitar amp or their home stereo system in the same room with their computer (or may not have either) is to use headphones. The synth provides an outlet for headphones, with an adjustable volume control. Besides all of the neat buttons to play with, i.e. portamento time, vibrato, envelope programming, etc., the sound is excellent. It is a professional quality instrument with some really great stand alone capabilities.

Unfortunately, it is no longer available. That's right, bunky, if you haven't bought one by now, you probably won't be able to find one because Casio quit making the CZ-101. (Enraging, isn't it?) The new version of the CZ-101 is the CZ-1050. The primary difference between the 101 and the 1050 is the keys. The 101 has buttons and the 1050 has membranes. If there were any other differences, they weren't visible to the casual observer.

The piece of software that I bought in order to run the synth was Music Studio. Music Studio has been reviewed by several different magazines and I found those reviews to be pretty representative of what I got for my \$49.95 (minus discount). Quite frankly, there are a few things that I really HATE about Music Studio, but first I'll talk about the good points. Ok, now let's get down to the things I really HATE! Just kidding. The good points are: It does load when you tap the icon. But seriously, it has a GEM interface, it supports the MIDI interface very well. You don't necessarily have to have a synth to use it, it supports most standard musical notation, and it has a decent library of songs that come with it, including some written specifically to demonstrate the use of the CZ-101's preset and internal sounds.

(continued...)

Music Studio and the Casio CZ-101 Synthesizer (continued...)

The GEM user interface is important for obvious reasons and no doubt you probably already knew that Music Studio was user-friendly (read, dummy proof) in this respect. Everything is nice and colorful and neatly color coded for us dyslexics.

MIDI implementation is a little tough to figure out, at first, but once you stop playing with the program and read the documentation, it's a snap. Everything works very nicely, with one minor exception. If you are trying to play a lot of 32nd notes and change back and forth between an instrument in preset #1 and another instrument in preset #5, one will supercede the other and you will hear only 1/2 of your composition. The only way that I can think of to compensate for this is to have a dubbing tape deck, where you can record each track independantly (the Music Studio supports tracks) and then dub them all together into a finished product. This is a pain, but unless you buy a Casio CZ-2250ACX with it's 4028 sounds, 11 MIDI channels, built-in track sequencer, high-level language control, and 2 CZ-101's as subordinate synthesizers, you just won't be able to be a one-man band. (Sounds impressive, eh? Sorry... I just made it up.)

If you don't have the cash to invest in a synthesizer (not that that makes any difference for some of us) (veni vidi visa: "We came, We saw, We went shopping) then you can still plunk down some cash for the Music Studio and tell yourself that someday you'll think about buying a synthesizer because the Music Studio plays right through the Yamaha sound chip in your Atari ST. This is a pretty good deal, eh?

Another reason why I like these sheet-music oriented music programs, like Music Construction Set and Music Studio, is because I like to buy the sheet music from the store, plug it into the machine, and listen to it play on the computer. Since Music Studio supports standard musical notation, it works very well in this respect. (???)

The last feature that sticks out, in my mind, is the library of songs that are included with Music Studio. There are quite a few different files, which can be loaded and played right off the bat. These songs demo the sound capabilities of the ST and the synthesizer very nicely. Additionally, there are two sets of song files designed specifically to demo the preset and internal sounds of the Casio CZ-101.

Now, the things that I really HATE about the Music Studio, which are probably very nitpicky irritants, are: Bridges (in music notation) work only for consecutive notes of the same value. This is typical, but not representative of most sheet music that I have tried. This forces you to compensate by working around the problem. However, everything else is fully supported (even more so than Music C

onstruction Set by Electronic Arts for the 8-bit). Whenever you move the pointer across the scale, it plays EVERY note! That's nice, but it gets really irritating about the 4th time you attempt to place a note on the scale and have to listen to it 'zing' as it attempts to play every note. You CAN turn the note off, but then you can't hear the notes when you place them on the scale (something I personally prefer). Menu selection is a chore. Calling different things from the menu can be a major pain because the menus are the click-down type instead of the touch & drop type. This means that you have to keep the mouse button depressed while selecting your option and if you accidentally let go of the button, you have to go back up to the menu bar. Some people prefer this arrangement (some people own a Macintosh!). But personally, I HATE it. Another thing that really makes me see red is rose-colored glasses, but I gave those up in 1969. Now, the thing that makes me see red is color-coded 700 (7-red, 0-green, and 0-blue), and that is the position of the menu items that change from one minute to the next. The position of menu items in Music Studio changes like a stack. In other words, whatever you called last is at the top. And finally, the thing that really IRQ's me (don't ask) is the copy-protected disk. Hey, look, I paid \$49.95 for a disk and I can't even make a back-up copy! I have to go out and pay another \$35.00 for a program that defeats the copy protection scheme. That makes a lot of sense. Oh sure, there are going to be some people who are going to want to give a copy to their friends and are

going to be thwarted by the copy protection, but it seems to me that the problem is in the marketing/pricing/distribution system and not with friendly users. I'M MAD AS HELL AND I'M NOT GOING TO TAKE IT ANYMORE! ARGGGGQ!!!

Hmmm, let's see. I guess that's about it. Overall, Music Studio is a pretty good piece of software. It has a few disappointments that can be directly traced to it's outrageous price tag. I mean, if I pay \$25.00 for a program, I'm not going to expect as much from it as if I had paid twice as much. But, if I pay \$25.00 for a program and it is as good as Music Studio, then I'll feel like I got a bargain and recommend it to anyone who'll listen. Music Studio is probably worth the money, but only because it has no similarly priced competition.

The Casio CZ synthesizers are very dynamic instruments. Even if you never hook it up to your computer, it is just as fun and sounds just as good as having a big organ. (Something I guess I'll never have, now.) I guess the biggest disappointment I had with the synthesizer is the fact that you can only play one sound at a time. Other than that, I love it! Atari Midi, Music Studio, & Casio, Go for it! You'll like it!

Bob Balay

Bob Balay is a Staff Sergeant in the U.S. Air Force, presently stationed at Shaw Air Force Base, in Sumter, S.C. He has been a member of the Atari community since his purchase of his first Atari 800, over 4 years ago. His job entails automated reports analysis on mainframe computers. He is also majoring in Computer Science at the Univ. of So. Carolina.

PLACE PALMETTO PRINTING AD HERE!

(305) 253-2444

13739 South Dixie Highway
Miami, Florida 33176

The Rumor Mill...



Wellsir, here it is July, and with a month-long break about to happen for The JOURNAL, I thought it might be fun to cover some of the topics that have been promised for the short term. I'll try to discuss them here, and let's see, by the next issue, in September, whether any, most, or all of them have actually come to pass!

PROMISES, PROMISES

We have been promised a number of items to be delivered during this "hot" month, and those are due to begin with the Megas, in QUANTITY. You believe that? Probably, BUT...withOUT blitter chips! Huh? Whazzat? You don't understand? Well, let me put it this way...when originally presented, the prototype for the Megas had blitter chips in them, and they were "promised" to us, by Atari, for our STs (520s and 1040s) as well. Somewhere along the way, the actual production yield is said to have dropped below 10%, and this sent Atari looking for a second source for production. This is evidently not an easy thing to do, as each forge reputedly has its own proprietary method for chip production, and it's difficult to "jump ship". Nevertheless, the first Megas will likely be delivered with an empty blitter socket, to be filled in, at a "later time", by your friendly dealer, who isn't likely to charge you *much*, right? (Sounds sorta familiar to those of us who signed on with STs early on, y'know?) If you've got a 520 or 1040, don't hold your breath for the blitter upgrade for your machine IN THE NEAR FUTURE, as the form factor (the shape, size, and even the method of mounting) has not yet been decided upon, it seems!

OK...on to the next "promised" item, the laser printer. Several pallets have been seen to arrive at Atari of late, and these reportedly held Atari laser printers, but there's still a few things missing to make these any different from several other laser printers out there...and that is the sort of PDL or page-description

language that they might implement. Atari held a desktop publishing conference in Sunnyvale last month, and showed the system, using "Easy Draw" as the program, and outputting through GDOS, BUT...the word is that this is NOT really going to produce a satisfactory solution for those of you who want to compete with PostScript-based output. Further, the "word" is that only one Atari executive remained convinced that GDOS should continue to be the choice, and recently, even he is now reported to be reconsidering! This would be a major feather in everyone's cap, if Atari were to embrace PostScript, moving "our machine" into a much more accepted realm of business machines. (Never mind that you are presently reading the output from a PostScript-capable program, created by a PostScript-capable printer! It's the "official embrace" that will put us in contention!)

This desire for PostScript could be resolved in one of several ways, including the use of a "wedge" device, that would serve as a mechanical interface between the computer and the printer, and allow a printer owner to upgrade from GDOS to PostScript at a later time. Quite attractive, really. Additionally, there are several "PostScript-lookalikes" just beginning to surface, and one of these might also serve instead. Almost any of these would be more desirable than GDOS, if you're serious about the quality of your output, since GDOS faces severe limits, both from its highly-restrictive bit-mapped mode beyond certain, specific sizes, as well as the necessity to write drivers for each type of printer that it will be used with. Added to the apparent lack of support from DRI, all roads should lead to PostScript!

OTHER HARDWARE NEWS

Several months ago, I first mentioned a product here, the "IMG Scan", which would bring to the ST

the same sort of digitizing capabilities as did the "Thunderscan" for the Macintosh. This is a definite need with these machines, and the promise for this product was quite good. Soft Logik, the publishers of "Publishing Partner", reached an agreement to market the device, and formed a contractual agreement with its developer. The product was not, at that time, ready for the commercial market, and time was agreed upon for that development. Unfortunately, that time came and went, and the product remained in what was deemed to be an "unmarketable" form. It has now reverted to the originator, and will likely never come to fruition. A shame, but at the same time, a brief lesson in the realities of business life. The market is there, the basic idea is there, but without the DESIRE of the developer to bring it to life, it has died a-bornin'.

Discussion with a number of developers around the country leads me to the conviction that we will shortly have several different scanners showing up, including one or more that use the Canon scanner at 300dpi. While the time delay is regrettable, I think it likely to lead to a more mature group of products.

Another hardware product was recently shown in prototype form, and is tentatively known as the "Mouse Master". To be produced by Practical Solutions, of Tucson, AZ (manufacturers of the "Monitor Master" switch), this latest device will be of particular interest to owners of 1040ST and 520STFM machines. It will plug into the mouse/joystick port, and allow for the remote connection of devices to these ports. Additionally, it will provide a switch on port 0, allowing the user to select between the mouse, or a joystick connected to this port. If you've ever fussed with those poorly-located ports on the 1040, then you know how difficult that it can be to use them. This device would remove that objection. If this one turns out to be as nicely-made as Monitor Master, it's sure to be a winner!

(continued...)

The Rumor Mill (continued...)

Paradox, also of Tucson, is presently working on producing a hardware-based PC emulator. This would effectively be a car box, allowing one to use several of the PC cards, and enabling the running of IBM software on the ST. Considering Paradox's "track record" with "MS EM", very few of us are holding our breath on this one!!!

Now that we've mentioned Paradox, and their "hang-on box", what of Atari's? Ha! Good question, no answer. They DO promise (still) that they'll be shipping the PC-clones by our next issue, however.

SOFTWARE

Following up the theme of emulators, let's talk about pc-ditto, the latest PC emulator, being produced by Avant Garde Systems, of Jacksonville, Florida. These folks appear to have their act together, and the entire approach, to date, has been highly professional, and responsible. As of this writing, they have not yet begun shipping, but are scheduled to do so by the time that you read this, so perhaps you'll know more about it

than I by that time! At any rate, it was shown at COMDEX/Atlanta last month, and attracted the attention of at least one well-known magazine columnist. Jerry Pournelle was reported to have been more than a bit pleased at its ability. Seems that it ran everything he tried! Keep your eyes open for this one, at \$89.95, and 80% of the IBM XT's speed, it should be good to have!

Atari has finally given in to requests for the release of an Atari 8-bit emulator, as written by a young man from Canada, Darek Mihocka. Darek has done quite a good job of writing a "beginning", that will likely be developed into a rather sophisticated emulation. At present, it runs many of the BASIC programs that we used to sit and so laboriously type in from the magazines, and if the addition of Player/Missile graphics comes to pass, it should be a lot of fun! Besides, for free, the price is certainly right!

Finally, we come to the direction that Atari is NOW taking...this month's rendition! They recently held a discussion with a number of Value-Added Resellers (VARs) in

Sunnyvale, with an eye towards establishing some emphasis on that aspect of sales. This was in conjunction with a front-page article appearing in "Computer and Software News", which stated that Atari was now saying that the mass market approach was wrong for their machines, and that they were now interested in actively pursuing the VARs and serious computer retailers. The most interesting part of this whole scenario was that the group of VARs was reportedly very Unix-oriented, and not at all familiar with Atari! Perhaps they are signs of the coming emphasis? Remember that rumored contract with AT&T for Unix System V, from last year? Perhaps it's about to come to fruition?

That would likely require a new machine, wouldn't it? Perhaps something more easily adaptable to multi-users? Possibly even something to compete, in the NEAR FUTURE, with the Mac II?

Here's hoping that by our next issue, all of your dreams have come true...



"function_aid"^{patent pending}

\$24.95

- 4 Blank inserts included (2"x 12")
- Designed & made only for the *ST
- Indispensable for business programs (word processors, telecommunications and data bases) etc.
- Unconditional 5 year Guarantee

*ST is a trademark of Atari Corporation
CompuServe PPN 76410,35



Add a shipping charge of 1.75 each

Overseas add \$7.00 shipping charge

CT residents add 7.5% Sales Tax



DEALER INQUIRIES WELCOME

Distributors of "function_aid"

STATIC ENGINEERING, INC. P.O. Box 570, Bristol, CT 06010 (203) 879-4671

Dade Atari Users Group NEWS

This page is provided each month for specific user-group-related news. A similar page is available to any user group choosing to utilize *The Atari JOURNAL* as their own newsletter. User group representatives may contact the Editor for further information. For details on this specific group, contact the author directly. Information provided here is the responsibility of the individual group and/or author.

The following is the list of public domain software for the Atari ST line of computers, as compiled and provided by the Dade Atari Users Group. All software is in the public domain. All software is provided by member contributions and is not warranted to be free of defects. Members who wish to provide public domain software may exchange a disk with two or more donated files for the most recent club disk. Please help by sharing anything of interest. (all disks are single-sided format, 360K, except as noted.)

Daugie-Bag #13 (February, 1987)

Accessory: DIGITAL.ACC - yes, another clock, actually the one from Germany from a previous D-Bag, only with English subtitles!
BASIC: EL_MATH.BAS - a math game for 1st and 2nd graders.
GAMES: DEPTHCRG.PRG - Can the destroyer USS TRAMIEL sink the sub in time? WNDWBALL.PRG - A 'fancy' version of the classic game 'Breakout'
BLACK.PRG - A very nice PD version of BlackJack card game. OGRE - the PD version of the popular game, in a folder with doc file. SNOOPY: Boot TINYVIEW.PRG to see an easy way to do animation on the ST. UTILITY: YARD_RAM.DSK - the shortest,

simplist, easiest RAMdisk prog. yet!
Docs. ACC_LOADER - allows you select .ACC files that you wish to load. SCRNSAVE.PRG - automatically blacks out screen after 2 minutes non-use. TEXT: CONECTOR.TXT - monitor and other cables ARE available, shows where. STBAGS.TXT - this file in ASCII format.

DAUGIE-BAG #14 (March, 87) (400K formatted)

Folders:

MONOPOLY - Possibly the BEST public domain game on any computer, ever!

HAUNTED HOUSE - An arcade-tyoe of climbing game

ETERNRAM - Eternal RAMdisk, reset-proof RAMdisk with doc and support files.

DEGAS.PRT - DEGAS printer drivers for the NEC P6/7, and OKI 20 printers.

Also includes PRTINST.PRG which can load ANY printer driver from the desktop when it is renamed DEGAS.PRT.

DAUGIE-BAG #15 (March, 87) (2 of 2)) 400K formatted

Folders:

LARN.GME - An adventure game construction set of massive size, remove write protect before using. Support and doc files are included.

HD_BACKUP - The "Turtle" harddrive backup program is purported to backup 20

megabytes on floppies in 11

minutes! Support and documen-

tation included.

KALKLOCK - An analog clock and calendar combination that may be used as a program or as a handy accessory (.ACC) file. The calendar will compute days between two dates.

Dade Atari Users Group Membership Application

Membership in The Dade Atari Users Group is open to all interested parties, and is intended to provide further education in the use of Atari brand microcomputers. Ownership of an Atari computer is not required. Meetings are held monthly, generally on the FIRST THURSDAY OF EACH MONTH, from 7:30 to 10:30 PM, on the Campus of Miami-Dade Community College, located at S.W. 104 Street, and S.W. 107 Avenue. Although rooms do change from time to time, presently we are using room #8205. More information may be obtained by contacting any DAUG officer, through Computer Spectrum BBS, 251-1925. Membership dues are \$20.00 per year, and include a subscription to *The Atari JOURNAL*, as well as discounts from many local retailers, and monthly "DAUG E-Bags", available in both 8-bit and 16-bit versions. Make Checks payable to "Dade Atari Users Group", and send to: Treasurer, DAUG, 13627 S.W. 112 Lane, Miami, FL 33186

Name: _____

Street Address: _____

City, State: _____ Zip: _____

Telephone: (Home/Evening) _____ (Work/Daytime) _____

FOR JUST

\$19.95

You can get the Industries largest catalogue listing everything for your Atari ST and showing the suggested retail price of each item.

IN ADDITION YOU GET

Get over 250 pages, 13,000 software titles, hardware, accessories, electronic products and computers including Atari, Atari ST, Commodore, IBM, Apple and etc., etc.

ATARI ACCESSORIES

Dust covers, cables, disk drives, joysticks, game controllers, power adaptors, printer cables, printers, rom chips, touch tablets, program recorders, ink rollers, ribbons, interface modules, buffers, modems, tutorials, video digitizers, program-mable robots, sound digitizers, wireless home controllers, light pens, expansion kits, RAM boards, furniture, disks, smart terminals, bass adapters, hard drive systems and a whole lot more.



TO BUY YOUR CATALOGUE

Just mail your \$19.95 to the Elk Grove address (free shipping) or call Karen.

ATARI SOFTWARE

Games, typing tutors, music, art gallery, printing programs, bridge, golf, sports data management, education, arcade games, graphic design, word processors, financial, painting, productivity, entertainment, adventure, idea processors, data bases, word keeping, telecommunications, card games, money management, computer languages, Basic, Cobol, Fortran, Pascal, Prolog and a whole lot more.



CSS HEADQUARTERS

495 A Busse Road
Elk Grove Village IL 60007

In State: 1-800-331-SOFT
Toll Free: 1-800-422-4912



COMPUTER SOFTWARE SERVICE

WE'VE GOT **THE MOVERS**

A CHAS. LEVY COMPANY

CSS EAST

129 Sherman Street
Cambridge, MA 02140

In State: (617) 876-2505
Toll Free: 1-800-343-7535

